

=> fil reg

FILE 'REGISTRY' ENTERED AT 11:38:59 ON 11 JUL 2008

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STRUCTURE FILE UPDATES: 10 JUL 2008 HIGHEST RN 1033542-87-8

DICTIONARY FILE UPDATES: 10 JUL 2008 HIGHEST RN 1033542-87-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

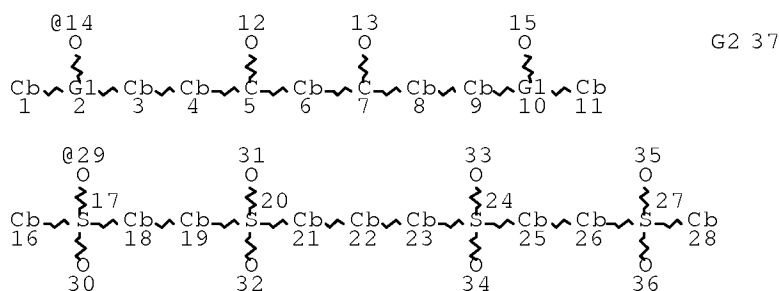
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

=> d que stat l13

L3 STR



VAR G1=C/S

VAR G2=14/29

NODE ATTRIBUTES:

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CONNECT IS E1 RC AT 13

CONNECT IS E1 RC AT 14

CONNECT IS E1 RC AT 15

CONNECT IS E1 RC AT 29

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DEFAULT MLEVEL IS ATOM

GGCAT IS MCY UNS AT 1

7/11/2008

10/585,808

2

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GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 37

STEREO ATTRIBUTES: NONE

L4 SCR 2043

L13 16 SEA FILE=REGISTRY SSS FUL L3 AND L4

100.0% PROCESSED 572471 ITERATIONS

16 ANSWERS

SEARCH TIME: 00.00.06

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(FILE 'HOME' ENTERED AT 11:00:34 ON 11 JUL 2008)

FILE 'HCAPLUS' ENTERED AT 11:00:49 ON 11 JUL 2008

E US20070196734/PN

L1 1 S E3
SEL RN

FILE 'REGISTRY' ENTERED AT 11:01:13 ON 11 JUL 2008

L2 28 S E1-28

FILE 'LREGISTRY' ENTERED AT 11:19:50 ON 11 JUL 2008

L3 STR

FILE 'REGISTRY' ENTERED AT 11:30:16 ON 11 JUL 2008

L4 SCR 2043
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L10 STR L8
L11 0 S L10 AND L4
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L13 16 S L3 AND L4 FUL
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SAV L13 THO808/A
L15 4 S L13 NOT L14

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L17 4 S L15
L18 6 S L16 OR L17

FILE 'CAOLD' ENTERED AT 11:40:02 ON 11 JUL 2008

L19 0 S L14

=> fil hcap

FILE 'HCAPLUS' ENTERED AT 11:39:08 ON 11 JUL 2008

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FILE COVERS 1907 - 11 Jul 2008 VOL 149 ISS 3

FILE LAST UPDATED: 10 Jul 2008 (20080710/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l18 ibib abs hitstr hitind 1-6

L18 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1454572 HCAPLUS Full-text

DOCUMENT NUMBER: 148:82156

TITLE: Ion-conducting membranes suitable for electrochemical devices

7/11/2008

10/585,808

4

INVENTOR(S): Colquhoun, Howard Matthew; Zhu, Zhixue;
Thompsett, David; Walsby, Nadia Michele
PATENT ASSIGNEE(S): Johnson Matthey Public Limited Company, UK;
University of Reading
SOURCE: PCT Int. Appl., 19pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2007144633	A1	20071221	WO 2007-GB2224	20070614

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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: GB 2006-11736 A 20060614

AB An ion-conducting membrane comprising a polymer component and a macrocyclic compound, wherein the macrocyclic compound is functionalized with one or more ion-conducting groups is disclosed. The membrane is suitable for use in a fuel cell.

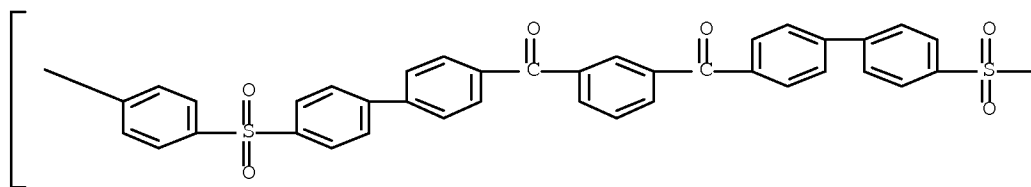
IT 960318-88-1

RL: TEM (Technical or engineered material use); USES (Uses)
(ion-conducting membranes suitable for electrochem. devices)

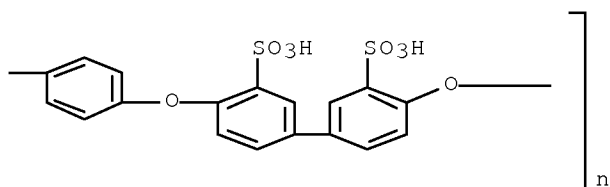
RN 960318-88-1 HCAPLUS

CN Poly[oxy(3,3'-disulfo[1,1'-biphenyl]-4,4'-diyl)oxy-1,4-phenylenesulfonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,3-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylsulfonyl-1,4-phenylene]
(CA INDEX NAME)

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PAGE 1-B



CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
 Section cross-reference(s): 38, 72
 IT 574-93-6, Phthalocyanine 27360-85-6 960318-88-1
 RL: TEM (Technical or engineered material use); USES (Uses)
 (ion-conducting membranes suitable for electrochem. devices)
 REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN
 THE RE FORMAT

L18 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:844131 HCAPLUS Full-text

DOCUMENT NUMBER: 144:394385

TITLE: Importance of sulphonic acid distribution
 pattern for low equivalent weight polyaromatic
 membranes

AUTHOR(S): Walsby, N.; Hogarth, M.; Thompsett, D.;
 Colquhoun, H. M.; Mortimore, W.; Zhu, Z.

CORPORATE SOURCE: Johnson Matthey Technology Centre, Sonning
 Common, RG4 9NH, UK

SOURCE: Preprints of Symposia - American Chemical
 Society, Division of Fuel Chemistry (2005),
 50(2), 523-524
 CODEN: PSADFZ; ISSN: 1521-4648

PUBLISHER: American Chemical Society, Division of Fuel
 Chemistry

DOCUMENT TYPE: Journal; (computer optical disk)

LANGUAGE: English

AB The authors controlled the sequence-distribution of sulfonic acid groups along
 a polymer chain to extend the possible solubility range for polyarom. ionomer
 in fuel cell use. Three polymers of similar equivalent weight but different
 structure were prepared, a polyethersulfone copolymer, a copolymer with 3 and
 4-ring co-monomers, and the third has a 9-ring monomer unit. When used in a
 conventional platinum catalyst fuel cell, the membrane with the 9-ring
 repeating unit was able to maintain a constant voltage of close to 0.8 V at
 500 mA/cm², 80 °C, 100% RH for over 450 h.

IT 860438-83-1DP, sulfonated 860438-84-2DP,
 sulfonated

RL: DEV (Device component use); PRP (Properties); SPN (Synthetic
 preparation); PREP (Preparation); USES (Uses)
 (importance of sulfonic acid distribution pattern for low equivalent
 weight polyarom. membranes)

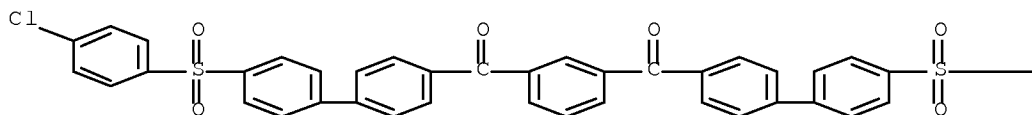
RN 860438-83-1 HCAPLUS

CN Methanone, 1,3-phenylenebis[[4'-[(4-chlorophenyl)sulfonyl][1,1'-
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 INDEX NAME)

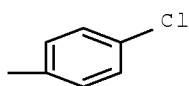
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CRN 860438-82-0
CMF C44 H28 Cl2 O6 S2

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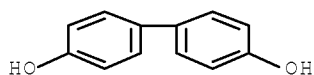


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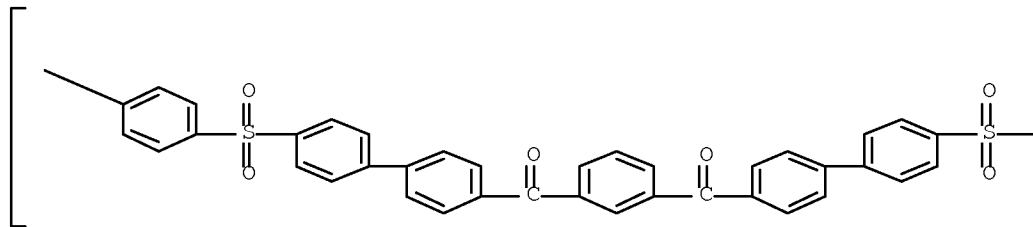
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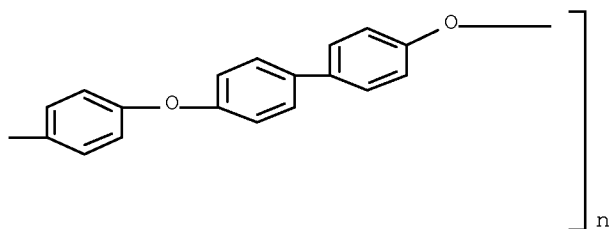
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CMF C12 H10 O2



RN 860438-84-2 HCAPLUS
CN Poly(oxy[1,1'-biphenyl]-4,4'-diyl-oxy-1,4-phenylenesulfonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,3-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylsulfonyl-1,4-phenylene) (9CI) (CA INDEX NAME)

PAGE 1-A





CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
 Section cross-reference(s): 35, 36, 76
 IT 170491-12-0DP, sulfonated ~~860438-83-1DP~~, sulfonated
~~860438-84-2DP~~, sulfonated 882698-07-9DP, sulfonated
 RL: DEV (Device component use); PRP (Properties); SPN (Synthetic
 preparation); PREP (Preparation); USES (Uses)
 (importance of sulfonic acid distribution pattern for low equivalent
 weight polyarom. membranes)
 REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN
 THE RE FORMAT

L18 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2005:673341 HCAPLUS Full-text
 DOCUMENT NUMBER: 143:154228
 TITLE: Ion-conducting polymers and membranes comprising
 them
 INVENTOR(S): Colquhoun, Howard Matthew; Zhu, Zhixue;
 Mortimore, William Alexander; Hogarth, Martin
 Philip; Walsby, Nadia Michele
 PATENT ASSIGNEE(S): Johnson Matthey Public Limited Company, UK
 SOURCE: PCT Int. Appl., 44 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

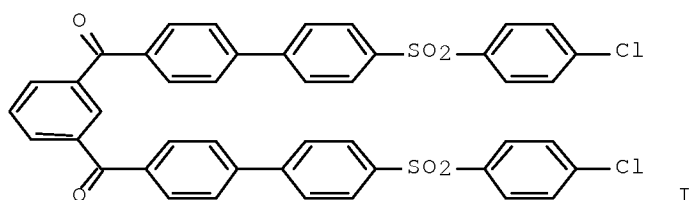
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WO 2005068536	A1	20050728	WO 2005-GB77	20050112

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 GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
 KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
 MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
 SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
 VC, VN, YU, ZA, ZM, ZW
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 GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2551687 A1 20050728 CA 2005-2551687

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EP 1704175	A1	20060927	EP 2005-701847	
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CN 1910222	A	20070207	CN 2005-80002277	
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JP 2007517952	T	20070705	JP 2006-548391	
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US 20070196734	A1	20070823	US 2007-585808	
				200704 30
PRIORITY APPLN. INFO.:			GB 2004-626	A 200401 13
			WO 2005-GB77	W 200501 12

GI



- AB An ion-conducting polymer wherein at least 80% of the repeat units comprise an ion-conducting region and a spacer region is disclosed. The ion-conducting region has an aromatic backbone of one or more aromatic groups, wherein at least one ion-conducting functional group is attached to each aromatic group. The spacer region has an aromatic backbone of at least four aromatic groups, wherein no ion-conducting functional groups are attached to the aromatic backbone. The polymer is suitable for use as a fuel cell membrane, and can be incorporated into membrane electrode assemblies. I was prepared and polymerized with 4,4'-biphenol, then sulfonated to give an ion-conducting polymer.
- IT 126351-48-2DP, sulfonated 126428-11-3DP, sulfonated 860438-83-1DP, sulfonated 860438-84-2DP, sulfonated 860438-85-3DP, sulfonated 860438-86-4DP, sulfonated 860438-87-5DP, sulfonated 860438-88-6DP, sulfonated 860438-90-0DP, sulfonated 860438-91-1DP, sulfonated 860438-94-4DP, sulfonated 860438-95-5DP, sulfonated
- RL: IMF (Industrial manufacture); TEM (Technical or engineered

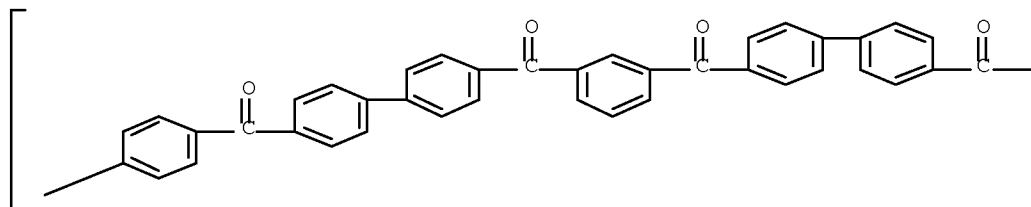
material use); PREP (Preparation); USES (Uses)

(ion-conducting polymers and membranes comprising them)

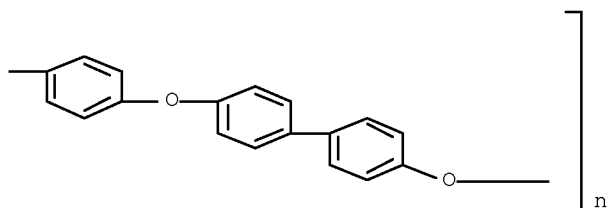
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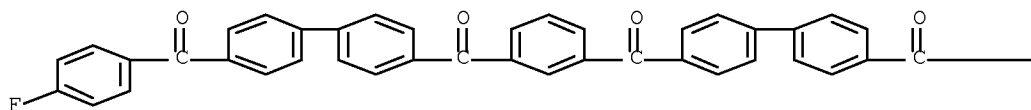
CN Methanone, 1,3-phenylenebis[[4'-(4-fluorobenzoyl)[1,1'-biphenyl]-4-yl]-, polymer with [1,1'-biphenyl]-4,4'-diol (9CI) (CA INDEX NAME)

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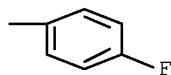
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CMF C46 H28 F2 O4

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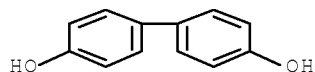
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CRN 92-88-6

CMF C12 H10 O2



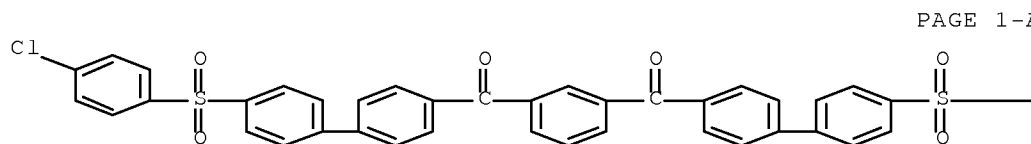
RN 860438-83-1 HCAPLUS

CN Methanone, 1,3-phenylenebis[[4'-[(4-chlorophenyl)sulfonyl][1,1'-biphenyl]-4-yl]-, polymer with [1,1'-biphenyl]-4,4'-diol (9CI) (CA INDEX NAME)

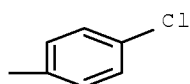
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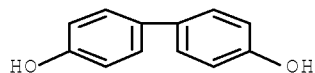


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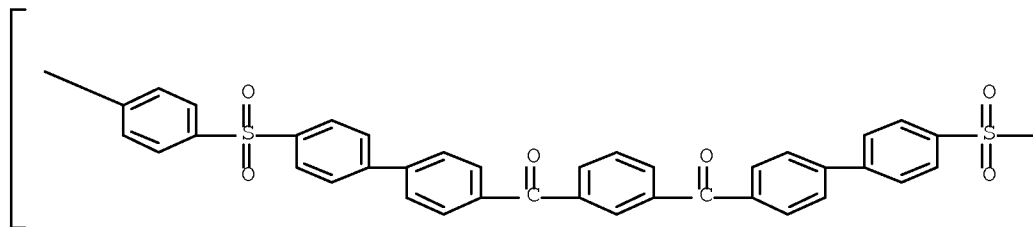
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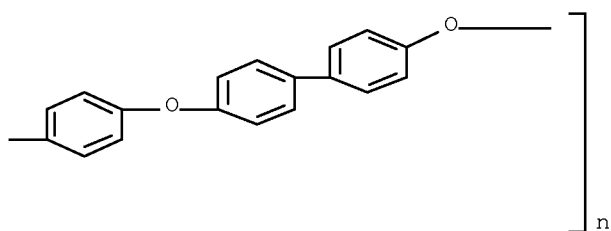
RN 860438-84-2 HCAPLUS

CN Poly(oxy[1,1'-biphenyl]-4,4'-diyl-oxy-1,4-phenylenesulfonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,3-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylsulfonyl-1,4-phenylene) (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



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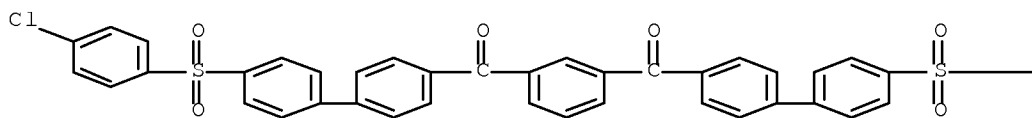
CN Benzenesulfonic acid, 3,3'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis[6-hydroxy-, polymer with 1,3-phenylenebis[[4'-[(4-chlorophenyl)sulfonyl][1,1'-biphenyl]-4-yl]methanone] (9CI) (CA INDEX NAME)

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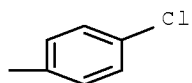
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CMF C44 H28 Cl2 O6 S2

PAGE 1-A



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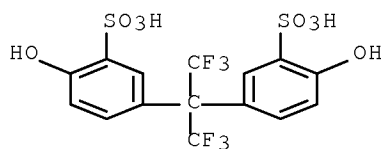
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7/11/2008

10/585,808

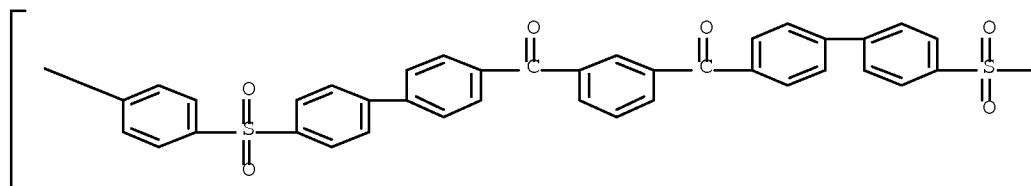
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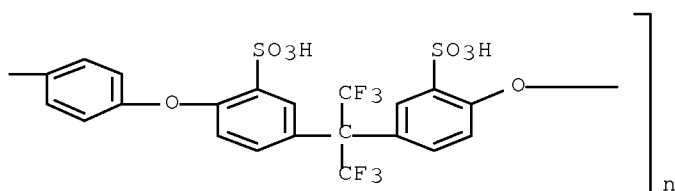


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 (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

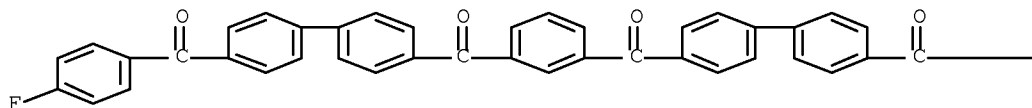


RN 860438-87-5 HCAPLUS
 CN Methanone, 1,3-phenylenebis[[4'-(4-fluorobenzoyl)[1,1'-biphenyl]-4-yl]-, polymer with 4,4'-[1,4-phenylenebis(oxy)]bis[phenol] (9CI)
 (CA INDEX NAME)

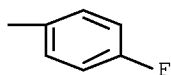
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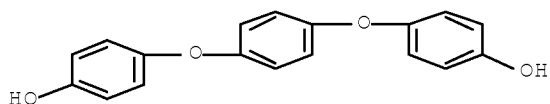
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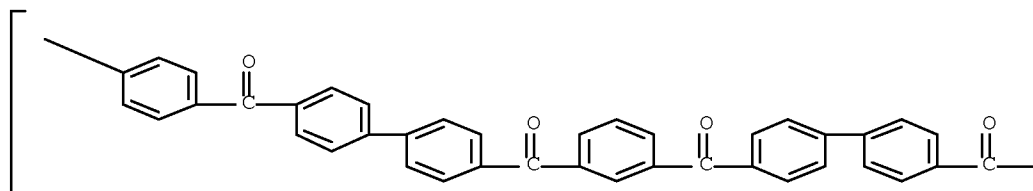
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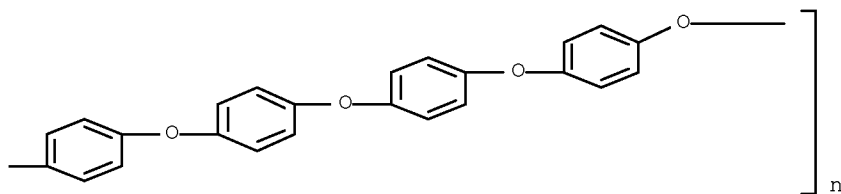
RN 860438-88-6 HCAPLUS

CN Poly(oxy-1,4-phenyleneoxy-1,4-phenyleneoxy-1,4-phenyleneoxy-1,4-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,3-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,4-phenylene)
(9CI) (CA INDEX NAME)

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RN 860438-90-0 HCAPLUS

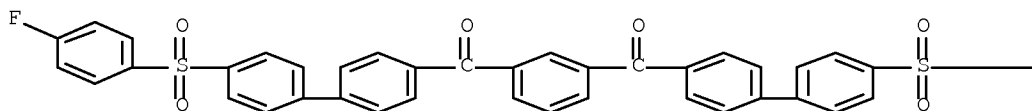
CN Methanone, 1,3-phenylenebis[[4'-[(4-fluorophenyl)sulfonyl][1,1'-biphenyl]-4-yl]-, polymer with 4,4'-[1,4-phenylenebis(oxy)]bis[phenol] (9CI) (CA INDEX NAME)

CM 1

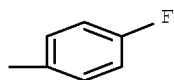
CRN 860438-89-7

CMF C44 H28 F2 O6 S2

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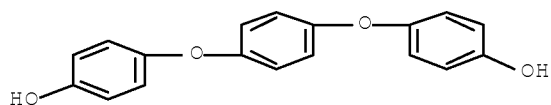
PAGE 1-B



CM 2

CRN 15051-26-0

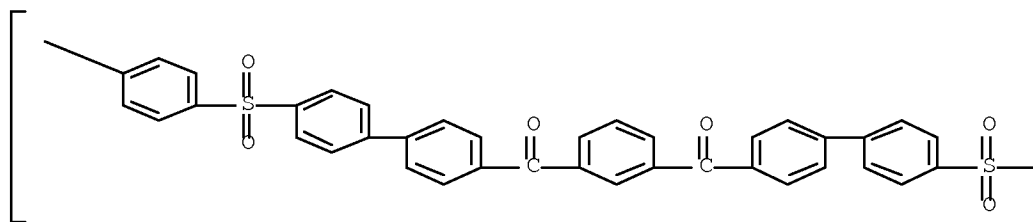
CMF C18 H14 O4



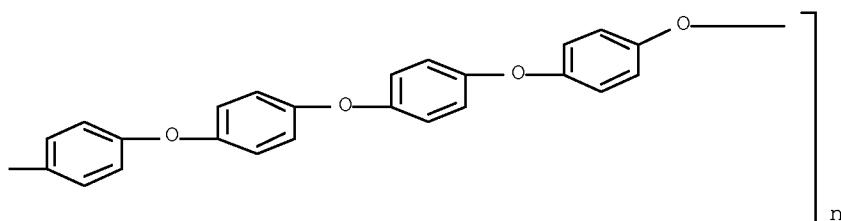
RN 860438-91-1 HCAPLUS

CN Poly(oxy-1,4-phenyleneoxy-1,4-phenyleneoxy-1,4-phenyleneoxy-1,4-phenylenesulfonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,3-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylsulfonyl-1,4-phenylene) (9CI) (CA INDEX NAME)

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RN 860438-94-4 HCAPLUS

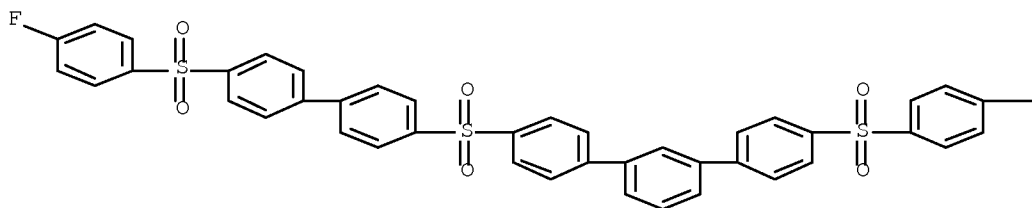
CN Phenol, 4,4'-[1,4-phenylenebis(oxy)]bis-, polymer with
 4,4''-bis[[4'-[(4-fluorophenyl)sulfonyl][1,1'-biphenyl]-4-yl)sulfonyl]-1,1':3',1''-terphenyl (9CI) (CA INDEX NAME)

CM 1

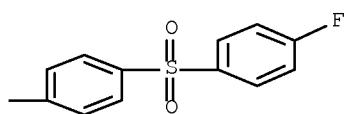
CRN 860438-93-3

CMF C54 H36 F2 O8 S4

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7/11/2008

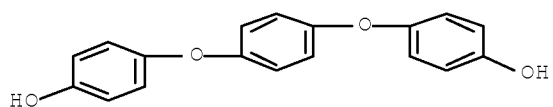
10/585,808

16

CM 2

CRN 15051-26-0

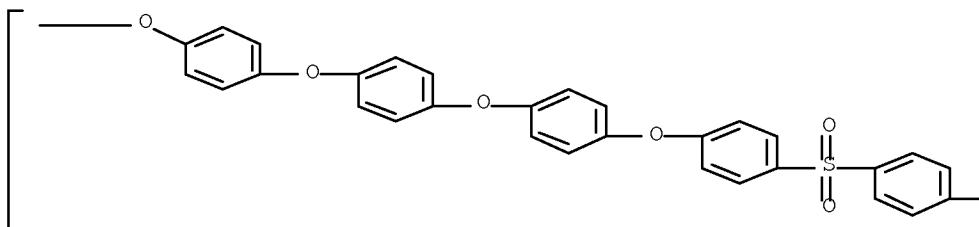
CMF C18 H14 O4



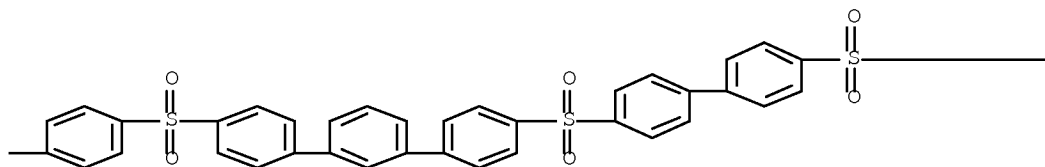
RN 860438-95-5 HCAPLUS

CN Poly(oxy-1,4-phenyleneoxy-1,4-phenyleneoxy-1,4-phenyleneoxy-1,4-phenylenesulfonyl[1,1'-biphenyl]-4,4'-diylsulfonyl[1,1':3',1''-terphenyl]-4,4''-diylsulfonyl[1,1'-biphenyl]-4,4'-diylsulfonyl-1,4-phenylene) (9CI) (CA INDEX NAME)

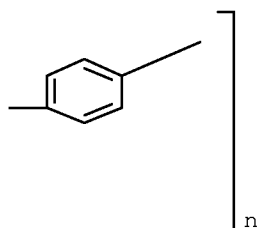
PAGE 1-A



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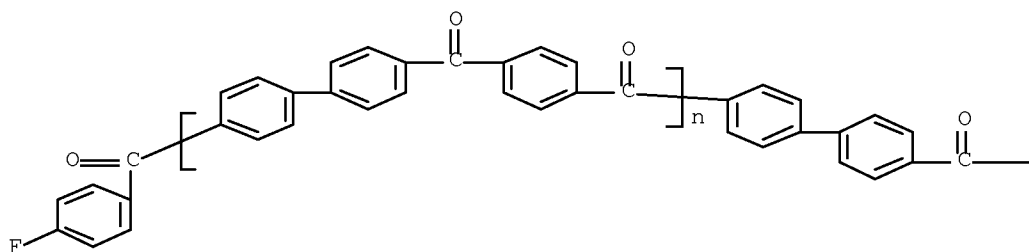
IC ICM C08G075-00
ICS C08G075-23; C08G073-10; H01M008-00; H01M008-02; H01M008-10
CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 52
IT 126351-48-2DP, sulfonated 126428-11-3DP,
sulfonated 860438-83-1DP, sulfonated 860438-84-2DP
, sulfonated 860438-85-3DP, sulfonated
860438-86-4DP, sulfonated 860438-87-5DP,
sulfonated 860438-88-6DP, sulfonated 860438-90-0DP
, sulfonated 860438-91-1DP, sulfonated
860438-94-4DP, sulfonated 860438-95-5DP,
sulfonated
RL: IMF (Industrial manufacture); TEM (Technical or engineered
material use); PREP (Preparation); USES (Uses)
(ion-conducting polymers and membranes comprising them)
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L18 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1991:656964 HCAPLUS Full-text
DOCUMENT NUMBER: 115:256964
ORIGINAL REFERENCE NO.: 115:43721a,43724a
TITLE: Bis(acid chloride) terminated polyaryl ether
ketone oligomer
INVENTOR(S): Clendinning, Robert A.; Harris, James E.;
Kwiatkowski, George T.; McMaster, Lee P.;
Matzner, Markus; Winslow, Paul A.
PATENT ASSIGNEE(S): Amoco Corp., USA
SOURCE: U.S., 20 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

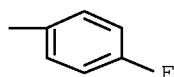
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 5037936	A	19910806	US 1989-342249	198904 24
PRIORITY APPLN. INFO.:			US 1989-342249	198904 24

AB The title oligomers have ≥ 3 repeating units containing ≥ 1 of biphenylene,
terphenylene, naphthylene and anthracenylene groups with number-average mol.
weight $\leq 10,000$, and are useful in preparation of block copolymers.
IT 122107-09-9P
RL: IMF (Industrial manufacture); PREP (Preparation)
(manufacture of, for preparation of block copolymers)
RN 122107-09-9 HCAPLUS
CN Poly([1,1'-biphenyl]-4,4'-diylcarbonyl-1,4-phenylenecarbonyl),
 α -(4-fluorobenzoyl)- ω -[4'-(4-fluorobenzoyl)[1,1'-
biphenyl]-4-yl]- (9CI) (CA INDEX NAME)

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IC ICM C08G008-02
 ICS C08G014-00; C07C031-18
 INCL 528125000
 CC 35-5 (Chemistry of Synthetic High Polymers)
 IT 403-43-0DP, reaction products with biphenyl-terephthaloyl chloride
 copolymer 122106-87-0DP, reaction products with fluorobenzoyl
 chloride 122107-09-9P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (manufacture of, for preparation of block copolymers)

L18 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1990:180126 HCAPLUS Full-text
 DOCUMENT NUMBER: 112:180126
 ORIGINAL REFERENCE NO.: 112:30487a,30490a
 TITLE: Aryl ketone and polyaryl ethers made therefrom
 INVENTOR(S): Newton, Alan Branford
 PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK
 SOURCE: Brit. UK Pat. Appl., 19 pp.
 CODEN: BAXXDU
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2217711	A	19891101	GB 1989-8701	19890418
PRIORITY APPLN. INFO.:			GB 1988-10202	19880429

OTHER SOURCE(S): CASREACT 112:180126

AB An aryl ketone $m\text{-C}_6\text{H}_4(\text{CO}-p\text{-C}_6\text{H}_4-p\text{-C}_6\text{H}_4\text{CO}-p\text{-C}_6\text{H}_4\text{X})_2$ (I; X = halo) is prepared and used in the preparation of polyether-polyketones. A mixture of 0.5 mol 4-FC₆H₄COCl, 100 g AlCl₃, and 60 mL 1,2,4-trichlorobenzene (II) was treated at 50° with 0.5 mol biphenyl in I, heated slowly to 160° to give 4-(4-fluorobenzoyl)biphenyl, treated at 40° with 0.26 mol isophthaloyl chloride and 66.7 g AlCl₃, and heated to 180° during 3.5 h to give I (X = F) which was polymerized with 4,4'-dihydroxybiphenyl or hydroquinone to give a polyether-polyketone.

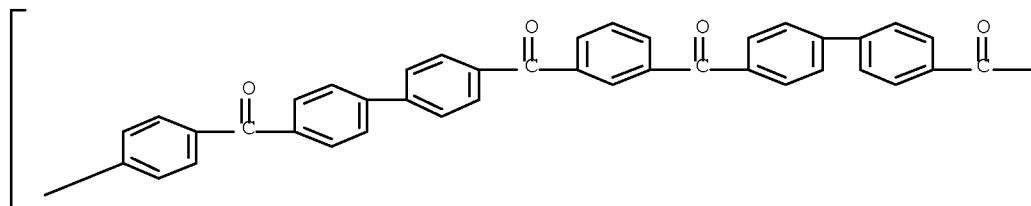
IT 126324-37-6P 126351-48-2P 126428-11-3P
126461-31-2P

RL: PREP (Preparation)
(preparation of)

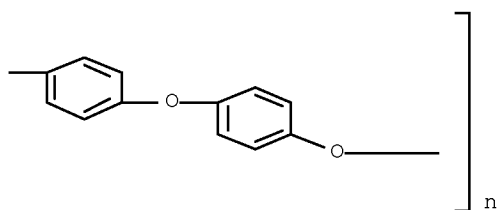
RN 126324-37-6 HCAPLUS

CN Poly(oxy-1,4-phenyleneoxy-1,4-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,3-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,4-phenylene) (9CI) (CA INDEX NAME)

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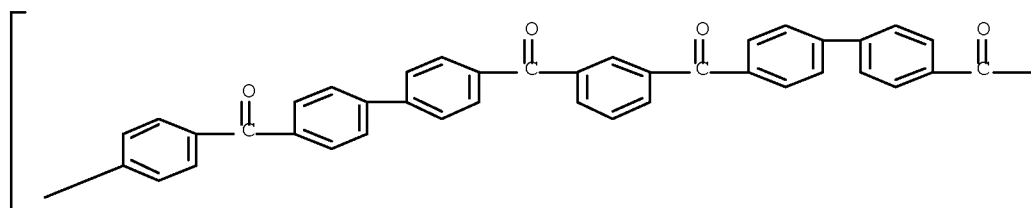
PAGE 1-B



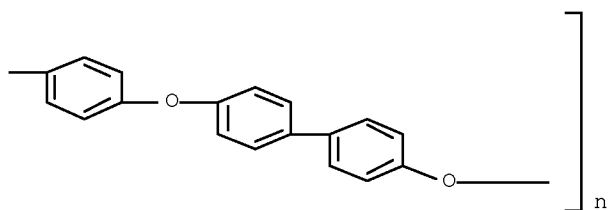
RN 126351-48-2 HCAPLUS

CN Poly(oxy[1,1'-biphenyl]-4,4'-diyl-1,4-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,3-phenylenecarbonyl[1,1'-biphenyl]-4,4'-diylcarbonyl-1,4-phenylene) (9CI) (CA INDEX NAME)

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RN 126428-11-3 HCAPLUS

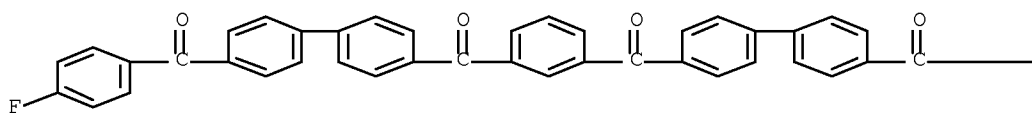
CN Methanone, 1,3-phenylenebis[[4'-(4-fluorobenzoyl)[1,1'-biphenyl]-4-yl]-, polymer with [1,1'-biphenyl]-4,4'-diol (9CI) (CA INDEX NAME)

CM 1

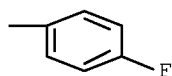
CRN 126428-10-2

CMF C46 H28 F2 O4

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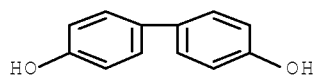
PAGE 1-B



CM 2

CRN 92-88-6

CMF C12 H10 O2



RN 126461-31-2 HCAPLUS

CN Methanone, 1,3-phenylenebis[[4'-(4-fluorobenzoyl)[1,1'-biphenyl]-4-yl]-, polymer with 1,4-benzenediol (9CI) (CA INDEX NAME)

CM 1

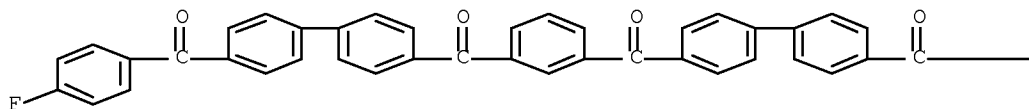
7/11/2008

10/585,808

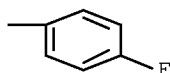
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CRN 126428-10-2
CMF C46 H28 F2 O4

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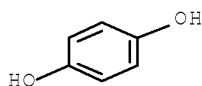


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CM 2

CRN 123-31-9
CMF C6 H6 O2



IC ICM C07C049-784
ICS C08G065-40; C08G067-00
CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 25
IT 126324-37-6P 126351-48-2P 126428-10-2P
126428-11-3P 126461-31-2P
RL: PREP (Preparation)
(preparation of)

L18 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:478864 HCAPLUS Full-text
DOCUMENT NUMBER: 111:78864
ORIGINAL REFERENCE NO.: 111:13303a,13306a
TITLE: Poly(aryl ether ketone) block copolymers and their manufacture
INVENTOR(S): Clendinning, Robert A.; Harris, James E.; Kwiatkowski, George T.; McMaster, Lee P.; Matzner, Markus; Winslow, Paul A.
PATENT ASSIGNEE(S): Amoco Corp., USA
SOURCE: U.S., 24 pp. Cont.-in-part of U.S. Ser. No. 729,580.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
US 4786694	A	19881122	US 1987-39310	198704 16
US 4774296	A	19880927	US 1985-729580	198505 02
EP 221149	A1	19870513	EP 1986-903053	198605 01
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE CN 86103808	A	19870304	CN 1986-103808	198605 02
CA 1267993	A1	19900417	CA 1986-508292	198605 02
US 4891167	A	19900102	US 1988-167034	198803 11
US 4861915	A	19890829	US 1988-174849	198803 29
PRIORITY APPLN. INFO.:			US 1985-729580	A2 198505 02
			US 1987-39310	A3 198704 16

AB Tough and crystalline title polymers with m.p. $\geq 100^\circ$ greater than its second order transition temperature contain biphenylene, terephenylene, naphthylene, and (or) anthracenylene units.. Thus, a mixture of Ph₂SO₂ 60.00, hydroquinone 3.30, 4,4'-difluorobenzophenone 5.89, Na₂CO₃ 6.16, and K₂CO₃ 0.42 g in 25 mL xylene was heated at 200° and 250° for 30 min each time, then at 300° for 1 h, combined with 5.59 g 4,4'-biphenol and 10.64 g 1,4-bis(p-fluorobenzoyl)benzene, and heated for 15 min to give a OH-terminated block copolymer with reduced viscosity 0.51 dL/g (1 g/100 mL H₂SO₄) and m.p.'s 323.4 and 420.8°.

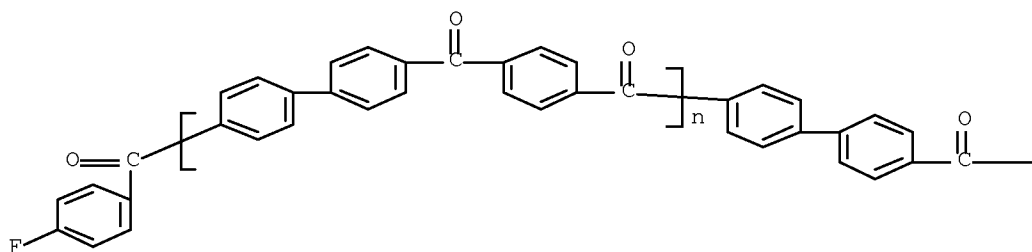
IT 122107-09-9P

RL: IMF (Industrial manufacture); PREP (Preparation)
(manufacture of, as precursors for high-melting polyoxyarylene-polyketones)

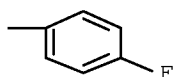
RN 122107-09-9 HCAPLUS

CN Poly([1,1'-biphenyl]-4,4'-diylcarbonyl-1,4-phenylenecarbonyl),
 α -(4-fluorobenzoyl)- ω -[4'-(4-fluorobenzoyl)[1,1'-
biphenyl]-4-yl]- (9CI) (CA INDEX NAME)

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IC	ICM	C08L061-00
	ICS	C08G016-00

INCL 525471000

CC 35-5 (Chemistry of Synthetic High Polymers)

IT 403-43-0DP, reaction products with biphenyl-terephthaloyl chloride
 copolymers 31694-16-3P 122106-87-0DP, reaction products with
 fluorobenzoyl chloride 122107-09-9P

RL: IMF (Industrial manufacture); PREP (Preparation)

(manufacture of, as precursors for high-melting polyoxyarylene-polyketones)

 \Rightarrow